

REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars:

Rejection of claims 1-10 under 35 U.S.C. § 112, first paragraph

Claims 1-10 presently stand rejected as failing to comply with the enablement requirement. This rejection is respectfully traversed for the following reasons.

Regarding independent claim 1, Examiner questions: (1) “how does determining whether recording or decoding is complete influence reducing file length;” (2) “why does applicant make this determination;” and (3) how are steps C and D distinguished from one another.

The present invention is characterized in that the musical file has a format in which one time field can correspond to one or more events, as shown in FIG 3 of the present invention. Therefore, a musical file may have several time fields, *each* time field corresponding to *one or more* events. For example, as shown below, a musical file has three time fields T1, T2 and T3, in which the first time field T1 corresponds to one event E11, the second time field E2 corresponds to three events E21, E22 and E23, and the third time field corresponds to two events E31 and E32.

**T1 E11 T2 E21 E22 E23 T3 E31 E32**

Because one time field may correspond to one, two, three or more events, when generating a musical file, one time field is not always followed by a fixed number of events, i.e. the number of events following the time field has to be determined dynamically, and thus it is necessary to determine whether all of the events corresponding to the time field are recorded.

Similarly, when playing a musical file, one time field is not always followed by a fixed number of events, and thus it is necessary to determine whether all of the events corresponding to the time field are decoded. Therefore, in comparison with a conventional

musical file in which one time field always corresponds to a fixed number of events (typically one event) and no determination of whether all of the events corresponding to a time field are recorded or decoded is required, the present invention differs from the conventional musical file.

Applicant notes that reduction in the file length is achieved because, according to the present invention, one time field corresponds to plural events that play at the same time. In contrast, it is conventional to use one time field to correspond one event, and thus plural time fields must be used to correspond to plural events even though the events are played at the same time. Accordingly, the file size of the present invention can be effectively reduced as the number of time fields is greatly decreased.

Thus, the relevance of determining whether events associated with a time field are completely recorded/decoded relates to the elimination of duplicate time fields that are necessary if a time field contains only a single event.

Furthermore, step (C) of claim 1 is used to determine whether all of the events corresponding to *a specific time field* are recorded completely. For example, for time field T1, it determines whether event E11 is recorded; for time field T2, it determines whether events E21, E22 and E23 are recorded; for time field T3, it determines whether events E31 and E32 are recorded. Step (D) of claim 1 is used to determine whether all events *of a musical file* are recorded completely. For example, it determines whether all events E11, E21, E22, E23 E31 and E32 are recorded. Thus, steps C and D are clearly distinct.

Regarding to claim 6, the limitation of determining whether decoding are completed reflects the feature of having a time field corresponding to one or more events in a musical file, which is different from the conventional musical file.

The present invention reduces the size of the musical file by reducing the number of time fields, since multiple events may be associated with a single time field.

In view of the above remarks and amendments to the claims, it is respectfully submitted that the specification provides a clear and enabling description of the claimed subject matter. Accordingly, withdrawal of the rejection is respectfully requested.

Rejection of claim 11 under 35 U.S.C. § 112, second paragraph

Claim 11 presently stands rejected as being indefinite. This rejection is respectfully traversed for the following reasons.

Referring to Fig. 3, a musical file consists of event fields and time fields arranged in series. Each time field can correspond to one or more event fields. The leftmost time field 31 is followed serially by (connected in series with) an event field 32, which is then connected in series with the middle time field 31 followed by (connected in series with) two event fields 32, which is further connected in series with the leftmost time field 31 followed by (connected in series with) an event field 32.

In view of amendments to the claims, it is respectfully submitted that the claims comply with the enablement requirement and provide sufficient definition to particularly point out and distinctly claim the subject matter which applicant regards as the invention to one of ordinary skill in the art. Accordingly, withdrawal of the rejection is respectfully requested.

Rejection of claim 11 under 35 U.S.C. § 102(a)

Claim 11 presently stands rejected as being anticipated by Furukawa (2003/0101862). This rejection is respectfully traversed for the following reasons.

According to the present invention, as set forth in claim 11, *one or more* event fields in a same interval immediately follow *one time field* corresponding to the same interval (FIG. 3), and the number of event fields within a time field is not limited, depending on the event types to be grouped.

It is respectfully submitted that Furukawa fails to disclose or suggest a computer-readable media storing a musical file, wherein time fields and event fields are arranged in a manner that one or more event fields are provided between two time fields, and wherein *a time field* is followed by *one or more* event fields corresponding to the time field, and the one or more event fields represent *one or more music* playback events occurred in the same time.

Furukawa discloses, in Fig. 2A, an arrangement wherein time series audio data are expressed with the audio data D1 and time codes D2. There is no teaching or suggestion that multiple audio data D1 can be associated with a single time code D2, and Fig 2A shows only a one-to-one relationship between a time code D2 and audio data D1. Referring to Fig. 2B, again a fixed arrangement is disclosed. Fig. 2B illustrates delta time codes D4, “indicative of the time interval between the event expressed by the leftmost event data codes D3 and the next event expressed by the event codes D3 on the right side thereof.” (Furukawa; paragraph [0008]).

Furukawa teaches that “when *two events* concurrently take place, the event codes D3 are followed by other event codes D3 as indicated by the *middle two boxes*.” (Furukawa; paragraph [0008]). Furukawa does not teach or suggest a flexible arrangement, referring only to two concurrent events. Therefore, Furukawa lacks flexibility and thus cannot effectively reduce the size of musical file by eliminating time fields in the manner of the present invention.

Moreover, in Furukawa, the two event codes that correspond to same delta time code are of the same event type. “An example of the event codes is shown in Fig. 2C, and represents a note-on or note off, a number assigned to the tone to be generated or decayed, and a velocity of the tone.” (Furukawa; paragraph [0008]). However, in the present invention, different event fields that correspond to the same time field may represent *different types of events*, such as enabling a timbre of violin and a timbre of piano.

Therefore, Furukawa fails to disclose or suggest each and every element set forth in claim 11, and accordingly claim 11 is allowable over the cited reference. Withdrawal of the rejection is respectfully requested.

Rejection of claims 1-10 under 35 U.S.C. § 103(a)

Claims 1 and 6 presently stand rejected as being unpatentable over Furukawa, and claims 2-5 and 7-10 are rejected as being unpatentable over Furukawa in view of Hikawa et al (U.S. 2005/0066796). These rejections are respectfully traversed for the following reasons.

Neither Furukawa nor Hikawa, nor any combination thereof, disclose or suggest a method for generating, (or playing), a musical file wherein an unlimited *variable number* (one or more) of event fields may correspond to a *single* time field. Further, neither Furukawa nor Hikawa, nor any combination thereof, disclose or suggest the methods of claims 1 and 6, exemplified by claim 1 wherein a recited method includes the steps of recording a relative time to a time field, recording an event corresponding to the relative time to an event field, determining whether *one or more* events corresponding to the relative time are recorded completely, and if not, continuing to record events corresponding to the relative time, determining whether all *the plurality of* events are recorded completely, and if not, continuing to record time fields and associated events, outputting the musical file.

Conclusion


In view of the amendments to the claims, and in further view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is requested that claims 1-11 be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicant's attorney, the Examiner is invited to contact the undersigned at the numbers shown.

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Respectfully submitted,

  
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